UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,090	05/11/2005	Ronald William Arthur	11134.0011.PCUS00	2800

23369 7590 04/02/2008

HOWREY LLP
C/O IP DOCKETING DEPARTMENT
2941 FAIRVIEW PARK DRIVE, SUITE 200
FALLS CHURCH, VA 22042-7195

EXAMINER	
BRADFORD, CANDACE L	
ART UNIT	**PAPER NUMBER**
3634	

MAIL DATE	DELIVERY MODE
04/02/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/520,090	ARTHUR, RONALD WILLIAM	
	Examiner	Art Unit	
	CANDACE L. BRADFORD	3634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 January 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/11/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because drawings are informal. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "the relative rotation" in lines 9 and 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the speed" in line 15. There is insufficient antecedent basis for this limitation in the claim.

Regarding claims 1, the term “and/or” is improper. Appropriate correction is required.

Claims 2 and 3 recites the limitation "the size" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the mating seat.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Chelnokov (SU820832). Chelnokov discloses a descent apparatus having a cable whose free end 10, is attachable to a fixed structure with the remainder of the cable wrapped around the drum. A person grips handles and jumps from the building to descend. Gear pump arranged between drum and drum mounting axle functions as a braking arrangement and controls the rotational speed of drum and thus the speed of descent as the cable unwinds. Similarly, also disclosed is a rope 6, attached to the building and the device being attached by a harness to the person evacuating the building.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feathers (5351906) in view Marinoff et. al. (4437546) and Orgeron (4520900). Feathers discloses a descent apparatus for loads and/or persons, said apparatus including a cable or rope 12, having one end adapted to fixed at an elevated location with the remainder of the cable or rope being wound around an inner pulley 10, rotatably mounted within an outer housing13, via an axle shaft 9, wherein the outer housing is adapted to be attached directly to the load and/or person, but fails to disclose the inner pulley and the axle shaft controlled by a closed circuit gear pump the gears of which form transmission means between the inner pulley and the axle shaft. Marinoff et. al. discloses a gear pump 48, forming part of a hydraulic circuit. Orgeron teaches the utility of a constriction 101, containing a constriction to control the speed of the pump and thus the speed of rotation of the inner pulley about the axle shaft and as a consequence the speed of descent of the descent apparatus as the cable or rope unwinds from the inner pulley. The use of a gear pump is commonly used in the art to drive the fluid through orifices to allow the device to operate smoothly. The use of constrictions are commonly used in the art to control the speed of decent. Therefore, it would have been obvious to one of ordinary to provide Feathers with a gear pump and constriction devices as taught by Marinoff and Orgeron respectively, so as to allow the device to operate smoothly and to control the speed of decent.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feathers (5351906) in view Marinoff et. al. (4437546) in further view of Orgeron (4520900). Orgeron discloses the descent apparatus as claimed in Claim I, wherein the size of the

constriction is fixed so as to provide a single predetermined speed of descent, as recited in column 6, lines 10 and 11.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feathers (5351906) in view Marinoff et. al. (4437546) in further view of Orgeron (4520900). Featers (5351906) in view Marinoff et. al. (4437546) in further view of Orgeron (4520900) fails to disclose a descent apparatus as claimed in Claim I, wherein the size of the constriction may be variable to provide for different speeds of descent. The use of a variable sized constriction device is commonly used in the art to allow for various speeds of descent to be obtained by the user. Therefore, it would have been obvious to one of ordinary skill in the art to provide the descent apparatus as taught by Feathers in view of Marioff in further view of Orgeron with a variable sized constriction device so as to allow for various speeds of descent to be obtained by the user.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feathers (5351906) in view Marinoff et. al. (4437546) in further view of Orgeron (4520900). Feathers discloses an inner pulley 10, includes as cup- shaped member located under retaining ring 11, as best seen in Figure 1 of Feathers, having an open end closed by a closure member both of which members carry radially outwardly extending flanges between which a space is defined to retain the cable or rope12, around the pulley.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feathers (5351906) in view Marinoff et. al. (4437546) in further view of Orgeron (4520900). Feathers discloses a cup-shaped member, located under retaining ring 11, as best seen

in Figure 1, and the closure member, located between the outer housing 13, and pulley 10, define an inner cavity which contains said closed circuit gear pump 48.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feathers (5351906) in view Marinoff et. al. (4437546) in further view of Orgeron (4520900). Feathers in view of Marinoff et. al. discloses a descent apparatus wherein the closed circuit gear pump 48, includes a central sun gear and a plurality of diametrically opposed planet gears, as best seen in Figure 12 of Feathers.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feathers (5351906) in view Marinoff et. al. (4437546) in further view of Orgeron (4520900). Feathers in view of Marinoff et. al. discloses sun and planet gears, as best seen in Figure 12 of Feathers, are rotably sandwiched between members which include a series of orifices and cavities and interconnecting channels through which hydraulic fluid for the hydraulic circuit is pumped through the closed circuit gear pump as recited in column 4, lines 38-47 of Marinoff et. al.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feathers (5351906) in view Marinoff et. al. (4437546) in further view of Orgeron (4520900). Orgeron discloses a descent apparatus as claimed in Claim 7, wherein the constriction 101, is provided in one of the orifices, cavities or channels, as best seen in Figure 6 of Orgeron.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feathers (5351906) in view Marinoff et. al. (4437546) in further view of Orgeron (4520900). Feathers (5351906) in view Marinoff et. al. (4437546) and in further view of Orgeron

(4520900) fails to disclose a descent apparatus as claimed in Claim 8, wherein the constriction is provided by one of the orifices through one of the members which sandwich the sun and the planet gears. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have the constriction placed by orifice, sandwiched between the sun and planet gears, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feathers (5351906) in view Marinoff et. al. (4437546) in view of Orgeron (4520900), in further view of Green et. al. (5494133). Feathers (5351906) in view Marinoff et. al. (4437546) in view of Orgeron (4520900), fails to disclose a descent apparatus as claimed in Claim 9, wherein the constriction is provided by a valve member cooperating with a mating seat in the end of said orifice. Green discloses a valve member, as recited in column 1, line 55. The use of valve is commonly used in the art to allows the user to descend at a controlled pace. Therefore, it would have been obvious to one of ordinary skill in the art to provide the descent device of Feathers in view of Marinoff in further view of Orgeron with a valve member as taught by Green et. al. so as to allow the user to descend at a controlled pace.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feathers (5351906) in view Marinoff et. al. (4437546) in view of Orgeron (4520900), in further view of Green et. al. (5494133). Feathers in view of Marinoff et. al. in view of Orgeron in further view of Green et. al fails to disclose a descent apparatus as claimed in Claim

I0, wherein the position of the valve member relative to its seat is adjustable to thereby control the rate of flow of hydraulic fluid through said closed circuit fluid pump and the speed of descant of the descent apparatus. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have the position of the valve relative to its seat, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CANDACE L. BRADFORD whose telephone number is (571)272-8967. The examiner can normally be reached on 9am until 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Mitchell can be reached on (571) 272-8967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KATHERINE W MITCHELL/
Supervisory Patent Examiner, Art Unit 3634

Candace L. Bradford
Patent Examiner
Art Unit 3634
February 6, 2008